

California Board of Registered Nursing

2011-2012 Annual School Report

Data Summary and Historical Trend Analysis

A Presentation of Pre-Licensure Nursing Education Programs in California

Central Coast

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INTRODUCTION

Each year, the California Board of Registered Nursing (BRN) requires all pre-licensure registered nursing programs in California to complete a survey detailing statistics of their programs, students and faculty. The survey collects data from August 1 through July 31. Information gathered from these surveys is compiled into a database and used to analyze trends in nursing education.

The BRN commissioned the University of California, San Francisco (UCSF) to conduct a historical analysis of data collected from the 2001-2002 through the 2011-2012 survey. In this report, we present ten years of historical data from the BRN Annual School Survey. Data analyses were conducted statewide and for nine economic regions¹ in California, with a separate report for each region. All reports are available on the BRN website (<http://www.rn.ca.gov/>).

This report presents data from the 4-county Central Coast. Counties in the region include Monterey, San Benito, San Luis Obispo, and Santa Barbara. All data are presented in aggregate form and describe overall trends in the areas and over the times specified and, therefore, may not be applicable to individual nursing education programs. Additional data from the past ten years of the BRN Annual School Survey are available in an interactive database on the BRN website.

Beginning with the 2011-2012 Annual School Survey, certain questions were revised to allow schools to report data separately for satellite campuses located in regions different from their home campus. This change was made to more accurately report student and faculty data by region, but it has the result that data which were previously reported in one region are now being reported in a different region. This is important because changes in regional totals that appear to signal either an increase or a decrease may in fact be the result of a program reporting satellite campus data in a different region. Data tables impacted by this change will be footnoted. In these instances, comparing 2011-2012 data to the previous year is not recommended. When regional totals include satellite campus data from a program whose home campus is located in a different region, it will be listed in Appendix A.

¹ The nine regions include: (1) Northern California, (2) Northern Sacramento Valley, (3) Greater Sacramento, (4) Bay Area, (5) San Joaquin Valley, (7) Central Coast, (8) Los Angeles Area (Los Angeles and Ventura counties), (9) Inland Empire (Orange, Riverside, and San Bernardino counties), and (10) Southern Border Region. Counties within each region are detailed in the corresponding regional report. The Central Sierra (Region 6) does not have any nursing education programs and was, therefore, not included in the analyses.

DATA SUMMARY AND HISTORICAL TREND ANALYSIS²

This analysis presents pre-licensure program data from the 2011-2012 BRN School Survey in comparison with data from previous years of the survey. Data items addressed include the number of nursing programs, enrollments, completions, retention rates, new graduate employment, student and faculty census data, the use of clinical simulation, availability of clinical space, and student clinical practice restrictions.

Trends in Pre-Licensure Nursing Programs

Number of Nursing Programs

There are five pre-license nursing programs in the Central Coast region, all of which are public ADN programs.

Number of Nursing Programs

	<i>Academic Year</i>									
	<i>2002-2003</i>	<i>2003-2004</i>	<i>2004-2005</i>	<i>2005-2006</i>	<i>2006-2007</i>	<i>2007-2008</i>	<i>2008-2009</i>	<i>2009-2010</i>	<i>2010-2011</i>	<i>2011-2012</i>
Total Nursing Programs	5	5	5	5	5	5	5	5	5	5
ADN	5	5	5	5	5	5	5	5	5	5
BSN	0	0	0	0	0	0	0	0	0	0
ELM	0	0	0	0	0	0	0	0	0	0
Public	5	5	5	5	5	5	5	5	5	5
Private	0	0	0	0	0	0	0	0	0	0
Total Number of Schools	5	5	5	5	5	5	5	5	5	5

Two of the five pre-license nursing programs (40%) in the region reported partnering with another nursing school to offers a higher degree in 2011-2012.

	Academic Year						
	<i>2005-2006</i>	<i>2006-2007</i>	<i>2007-2008</i>	<i>2008-2009</i>	<i>2009-2010</i>	<i>2010-2011</i>	<i>2011-2012</i>
Partnerships*							
Schools that partner with another program that leads to a higher degree	0%	0%	0%	0%	20.0%	20.0%	40.0%
Total number of programs	5	4	5	5	5	5	5

*These data were collected for the first time in 2005-2006.

² 2011-2012 data may be influenced by satellite campus data being reported and allocated to their proper region for the first time in the 2011-2012 survey. Tables affected by this change are noted, and we caution the reader against comparing data collected in 2011-2012 with data collected in previous year's surveys.

Admission Spaces and New Student Enrollments

Pre-license nursing programs in the Central Coast region reported a total of 235 spaces available for new students in 2011-2012, which were filled with a total of 237 students. Two of the region's five nursing programs reported filling one more admission space than was available to account for attrition.

Availability and Utilization of Admission Spaces[†]

	Academic Year									
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Spaces Available	240	167	182	238	248	248	246	251	226	235
New Student Enrollments	242	167	181	228	253	251	253	239	228	237
% Spaces Filled	100.8%	100.0%	99.5%	95.8%	102.0%	101.2%	102.8%	95.2%	100.9%	100.9%

[†]2011-2012 data may be influenced by the allocation of satellite campus data from another region

Pre-license nursing programs in the Central Coast region continue to receive more applications requesting entrance into their programs than can be accommodated. 67.8% (n=500) of the 737 qualified applications received in 2011-2012 were not accepted for admission.

Student Admission Applications*

	Academic Year									
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Qualified Applications[†]	397	335	410	522	413	405	551	445	564	737
Accepted	242	167	181	228	253	251	253	239	228	237
Not Accepted	155	168	229	294	160	154	298	206	336	500
% Qualified Applications Not Accepted	39.0%	50.1%	55.9%	56.3%	38.7%	38.0%	54.1%	46.3%	59.6%	67.8%

*These data represent applications, not individuals. A change in the number of applications may not represent an equivalent change in the number of individuals applying to nursing school.

[†]2011-2012 data may be influenced by the allocation of satellite campus data from another region

The number of new students enrolling in AD programs in the region has declined slightly from a high of 253 students in 2008-2009 to 214 students in 2011-2012.

New Student Enrollment by Program Type

	Academic Year									
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
New Student Enrollment[†]	242	167	181	228	253	251	253	239	228	237
ADN	242	167	181	228	253	251	253	239	228	214
BSN										23

[†]2011-2012 data may be influenced by the allocation of satellite campus data from another region

Student Census Data

A total of 358 students were enrolled in a Central Coast pre-license nursing program as of October 15, 2012. The 2012 census of the region's programs indicates that almost all (95.8%, n=343) of students were enrolled in an ADN program.

Student Census Data*

Program Type	Year									
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ADN	382	242	351	432	464	452	433	384	371	343
BSN [†]										15
Total Nursing Students	382	242	351	432	464	452	433	384	371	358

*Census data represent the number of students on October 15th of the given year

[†]2012 data may be influenced by the allocation of satellite campus data from another region

Student Completions

Prelicense nursing programs in the Central Coast region reported a total of 202 completions in 2011-2012, all of them from ADN programs. This marks a slight increase compared with the previous year, but still 15.5% (n=37) lower than the ten-year high reported in 2008-2009.

Student Completions

	Academic Year									
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Student Completions	186	175	149	145	172	212	239	235	194	202
ADN	186	175	149	145	172	212	239	235	194	202

Retention and Attrition Rates

Of the 211 students scheduled to complete a nursing program in the 2011-2012 academic year, 85.8% (n=181) completed the program on-time, 1.4% (n=3) are still enrolled in the program, and 12.8% (n=27) dropped out or were disqualified from the program. This marks an increase in the retention rate and a decline in the attrition rate compared to the previous year.

Student Retention and Attrition

	<i>Academic Year</i>									
	<i>2002-2003</i>	<i>2003-2004</i>	<i>2004-2005</i>	<i>2005-2006</i>	<i>2006-2007</i>	<i>2007-2008</i>	<i>2008-2009</i>	<i>2009-2010</i>	<i>2010-2011</i>	<i>2011-2012</i>
Students Scheduled to Complete the Program	295	193	226	209	219	247	253	222	218	211
Completed On Time	182	128	131	160	149	159	168	193	174	181
Still Enrolled	66	7	19	3	17	62	52	6	10	3
Attrition	47	58	76	46	53	26	33	23	34	27
Completed Late [‡]								15	0	4
Retention Rate*	61.7%	66.3%	58.0%	76.6%	68.0%	64.4%	66.4%	86.9%	79.8%	85.8%
Attrition Rate**	15.9%	30.1%	33.6%	22.0%	24.2%	10.5%	13.0%	10.4%	15.6%	12.8%
% Still Enrolled	22.4%	3.6%	8.4%	1.4%	7.8%	25.1%	20.6%	2.7%	4.6%	1.4%

[‡]Data were collected for the first time in the 2009-2010 survey. These completions are not included in the calculation of either the retention or attrition rates.

*Retention rate = (students completing program on-time)/(students scheduled to complete)

**Attrition rate = (students dropped or disqualified who were scheduled to complete)/(students scheduled to complete)

Note: Blank cells indicate the information was not requested in the given year.

Employment of Recent Nursing Program Graduates³

As with other regions, hospitals are the most frequently reported work setting for recent graduates of a pre-license nursing program in the Central Coast region. However, hospital-based employment has been in decline in recent years, falling from a high of 80.4% in 2007-2008. In 2011-2012, 47.6% of recent graduates reported being employed in a hospital setting. The share of new graduates working as nurses in California has also been decreasing in recent years, falling from a high of 94.6% in 2006-2007. In 2011-2012, only 70.4% of recent graduates reported being employed in nursing in California. Nursing programs in the region also reported that 10.3% of their 2011-2012 graduates had been unable to find employment by October 2012. This marks a 4.7% decline compared to the previous year.

Employment of Recent Nursing Program Graduates

Employment Location	Academic Year							
	<i>2004-2005</i>	<i>2005-2006</i>	<i>2006-2007</i>	<i>2007-2008</i>	<i>2008-2009</i>	<i>2009-2010</i>	<i>2010-2011</i>	<i>2011-2012</i>
Hospital	85.2%	72.6%	74.8%	80.4%	50.0%	54.2%	42.6%	47.6%
Long-term care facilities	4.0%	0.4%	2.5%	4.0%	22.3%	16.4%	12.4%	15.4%
Community/public health facilities	1.3%	2.8%	5.3%	5.8%	6.3%	0%	6.0%	5.4%
Other healthcare facilities	4.7%	4.2%	4.3%	6.4%	6.7%	7.3%	9.5%	8.3%
Other	1.3%	20.0%	1.0%	3.4%	0%	19.3%	2.3%	12.9%
Unable to find employment*						15.0%	15.0%	10.3%
In California	93.3%	76.6%	94.6%	73.4%	74.3%	78.8%	69.2%	70.4%

*Data were added to the survey in 2009-2010

Note: Blank cells indicate the information was not requested in the given year

³ Graduates whose employment setting was reported as "unknown" have been excluded from this table. In 2011-2012, on average, the employment setting was unknown for 29% of recent graduates.

Clinical Simulation in Nursing Education

Between 8/1/11 and 7/31/12, all five Central Coast nursing schools reported using clinical simulation⁴. The most frequently reported reasons for why schools in the region used a clinical simulation center in 2011-2012 were to standardize clinical experiences, to provide clinical experience not available in a clinical setting, and to check clinical competencies. Of the five schools that used clinical simulation centers in 2011-2012, 20% (n=1) plan to expand the center.

Reasons for Using a Clinical Simulation Center*	2007-08	2008-09	2009-10	2010-11	2011-12
To standardize clinical experiences	100.0%	100.0%	80.0%	100.0%	100.0%
To provide clinical experience not available in a clinical setting	33.3%	50.0%	60.0%	80.0%	60.0%
To check clinical competencies	33.3%	100.0%	80.0%	40.0%	60.0%
To make up for clinical experiences	0.0%	0.0%	80.0%	20.0%	20.0%
To increase capacity in your nursing program	33.3%	0.0%	20.0%	40.0%	40.0%
Number of schools that use a clinical simulation center	3	4	5	5	5

*These data were collected for the first time in 2006-2007. However, changes in these questions for the 2007-2008 administration of the survey and lack of confidence in the reliability of the 2006-2007 data prevent comparability of the data. Therefore, data prior to 2007-2008 are not shown.

Clinical Space & Clinical Practice Restrictions⁵

No pre-license nursing programs in the Central Coast region reported being denied access to a clinical placement, unit or shift in 2011-2012.

Denied Clinical Space	2010-11	2011-12
Programs Denied Clinical Placement	1	0
Programs Offered Alternative by Site	0	-
Placements Lost	1	-
Number of programs that reported	5	5
Programs Denied Clinical Unit	1	0
Programs Offered Alternative by Site	1	-
Units Lost	1	-
Number of programs that reported	5	5
Programs Denied Clinical Shift	0	0
Programs Offered Alternative by Site	-	-
Shifts Lost	-	-
Number of programs that reported	5	5
Total number of students affected	16	0

⁴ Clinical simulation provides a simulated real-time nursing care experience using clinical scenarios and low to hi-fidelity mannequins, which allow students to integrate, apply, and refine specific skills and abilities that are based on theoretical concepts and scientific knowledge. It may include videotaping, de-briefing and dialogue as part of the learning process.

⁵ Some of these data were collected for the first time in 2009-2010. However, changes in these questions for the 2010-2011 administration of the survey prevent comparability of the data. Therefore, data prior to 2010-2011 is not shown.

One pre-license nursing program in the Central Coast region reported an increase in out-of-hospital clinical placements in 2011-2012. This increase included placements in public health/community health agencies, skilled nursing or rehabilitation facilities, outpatient mental health/substance abuse clinics, medical practice sites/clinics/physician, and home health services among others.

Alternative Clinical Sites*	2010-11	2011-12
Public health or community health agency	-	100%
Skilled nursing/rehabilitation facility	-	100%
Outpatient mental health/substance abuse	-	100%
Medical practice, clinic, physician office	-	100%
Home health agency/home health service	-	100%
School health service (K-12 or college)	-	0%
Hospice	-	100%
Surgery center/ambulatory care center	-	100%
Urgent care, not hospital-based	-	0%
Case management/disease management	-	100%
Correctional facility, prison or jail	-	0%
Occupational health or employee health service	-	0%
Renal dialysis unit	-	0%
Number of programs that reported	0	1

*Data collected for the first time in 2010-2011

Three Central Coast schools reported that pre-licensure students in their programs had encountered restrictions to clinical practice imposed on them by clinical facilities in 2011-2012 (the same number of schools compared to one year ago). The most frequently reported restrictions were access to bar coding medication administration, and having direct communication with the health team.

Common Types of Restricted Access for RN Students	2009-10	2010-11	2011-12
Bar coding medication administration	-	66.7%	66.7%
Automated medical supply cabinets	-	33.3%	33.3%
Clinical site due to visit from accrediting agency (Joint Commission)	-	33.3%	33.3%
Some patients due to staff workload		33.3%	33.3%
Alternative setting due to liability	-	0%	33.3%
Direct communication with health team	-	0%	66.7%
Electronic Medical Records	-	0%	0%
Glucometers	-	0%	0%
IV medication administration	-	0%	0%
Student health and safety requirements		0%	0%
Number of schools that reported	0	3	3

Note: Blank cells indicated that the applicable information was not requested in the given year.

Faculty Census Data⁶

On October 15, 2012, programs in the region reported a total of 70 nursing faculty⁷. 41.4% (n=29) were reported as full-time and 58.6% (n=41) were part-time. Schools also reported 7 vacant faculty positions, representing a 9.1% faculty vacancy rate.

Faculty Census Data[†]

	Year									
	2003	2004	2005*	2006	2007	2008	2009	2010	2011	2012
Total Faculty	47	41	49	64	58	70	76	77	76	70
Full-time	35	28	29	38	40	40	36	45	32	29
Part-time	12	13	10	26	18	30	40	32	44	41
Vacancy Rate**	6.0%	16.3%	3.9%	11.1%	14.7%	2.8%	2.6%	2.5%	0%	9.1%
Vacancies	3	8	2	8	10	2	2	2	0	7

[†]2012 data may be influenced by the allocation of satellite campus data from another region

*The sum of full- and part-time faculty did not equal the total faculty reported in these years.

**Vacancy rate = number of vacancies/(total faculty + number of vacancies)

In 2011-2012, four out of five nursing schools in the Central Coast region reported that their faculty work overloaded schedules, and 100% of these schools pay the faculty extra for the overloaded schedule.

Overloaded Schedules for Faculty*	Academic Year			
	2008-09	2009-10	2010-11	2011-12
Schools with overloaded faculty	4	4	4	4
Share of schools that pay faculty extra for the overload	100%	100%	100%	100%
Total number of schools	5	5	5	5

*Data were collected for the first time in 2008-2009

⁶ Census data represent the number of faculty on October 15th of the given year.

⁷ Since faculty may work at more than one school, the number of faculty reported may be greater than the actual number of individuals who serve as faculty in nursing schools in the region.

Summary

The number of pre-license nursing programs in the Central California region remained consistent with previous years. Total admission space and new student enrollments have fluctuated within a narrow range over the past seven years, indicating stability in the region's capacity to train new nurses. Nursing programs in the region continued to receive more qualified applications than could be accommodated. In 2011-2012, 67.8% (n=500) of qualified applications were not accepted for admission.

Programs in the region reported a total of 202 completions in 2011-2012, which represents a small increase over the previous year, but approximately 16% below the ten-year high reported in 2008-2009. The average retention rate for the region in 2011-2012 was 85.8%, which is only the second time in the past decade it has exceeded 80%. Hospitals remain the most frequently reported work setting for recent graduates of the region's programs, although the share of recent graduates employed at a hospital has been declining in recent years. In 2012, 10.3% of recent graduates reported having been unable to find employment in nursing at the time of the survey. Approximately 70% of recent graduates employed in nursing reported employment based in California.

All of the schools in the Central Coast reported using clinical simulation, which is seen as a tool for providing clinical experiences that are otherwise not available to students, for standardizing students' clinical experiences and for monitoring clinical competencies. None of the schools in the region reported being denied access to clinical placement sites, but one school did report an increase in out-of-hospital clinical placements, which included public health/community health agencies, medical practice sites/clinics/physician, and skilled nursing or rehabilitation facilities. Three schools reported that students in their programs had encountered restrictions to clinical practice imposed on them by clinical facilities, with the most common types of restriction being access to bar coding medication administration and restrictions to direct communication with the health team.

Expansion in RN education has required nursing programs to hire more faculty to teach the growing number of students. Although the number of nursing faculty has increased by nearly 50% in the past ten years, programs reported a continuing need to hire more faculty members. In 2011-2012, seven faculty vacancies were reported, representing a faculty vacancy rate of 9.1%.

APPENDICES

APPENDIX A – Central Coast Nursing Education Programs

ADN Programs (5)

Allan Hancock College
Cuesta College
Hartnell College
Monterey Peninsula College
Santa Barbara City College

Satellite Campus (1)

CSU Channel Islands – BSN

APPENDIX B – BRN Education Issues Workgroup Members

BRN Education Issues Workgroup Members

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